

Response After Final  
Serial No. 10/797,596  
Attorney Docket No. 042184

**REMARKS**

Claims 1 - 28 are pending in the present application. By this Amendment, claims 1 and 9 have been amended and claims 2 and 10 have been cancelled. No new matter has been added. It is respectfully submitted that this Amendment is fully responsive to the Office Action dated November 29, 2005.

**Allowable Subject Matter:**

Applicants gratefully acknowledge the indication in item 7 of the Action that claims 6-8, 14-16, 21, 22, 27 and 28 have been allowed.

Applicants also gratefully acknowledges the indication in item 8 of the Office Action that claims 3, 4, 11 and 12 would be allowable, if amended, to include all of the limitations of the base claim and any intervening claims.

However, for at least the reasons discussed below, it is respectfully submitted that all of claims 1, 3-5, 9, 11, 12, 13, 17, 18, 19, 20, 23, 24, 25 and 26 are allowable.

**As to the Merits:**

As to the merits of this case, the Examiner sets forth the following rejections:

1) claims 1, 2 and 5 stand rejected under 35 USC 102(b) as being anticipated by

Hatakeyama (U.S. Patent No. 5,883,470, of record);

Response After Final  
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Attorney Docket No. 042184

2) claims 1, 9, 17-20 and 23-26 stand rejected under 35 USC 102(b) as being anticipated by Zhang et al. (U.S. Patent No. 6,291,357, of record); and

3) claims 9, 10 and 13-16 stand rejected under 35 USC 103(a) as being unpatentable over Hatakeyama in view of Fig. 1 of Applicant's admitted prior art (AAPA).

Each of these rejections is respectfully traversed.

**The Hatakeyama Reference:**

Claim 1, as amended, now calls for *an antenna disposed in said plasma generating chamber so as to face said first electrode for generating plasma in said plasma generating chamber*. Independent claim 9 has been amended in the same manner.

For example, as discussed in paragraph [0047] of the present specification, the antenna is disposed within the plasma generating chamber. It is respectfully submitted that claims 1 and 9, as amended, are clearly distinguished from Hatakeyama, since Hatakeyama fails to disclose that the excitation coil 25 is disposed in the discharge tube 21.

As such, it is submitted that Hatakeyama fails to disclose or fairly suggest the features of claims 1 and 9 concerning *an antenna disposed in said plasma generating chamber so as to face said first electrode for generating plasma in said plasma generating chamber.*

**The Zhang Reference:**

According to col. 8, lines 39-54 of Zhang et al.:

The first and second electrodes 210, 215 are electrically biased relative to one another by the electrode voltage supply 230 that includes an AC voltage supply for providing a plasma generating RF voltage to the second electrode 215, and a DC voltage supply for providing a chucking voltage to the second electrode 215. The AC voltage supply provides an RF generating voltage having one or more frequencies from 50 KHz to 60 MHz, and preferably about 2MHz. The power level of the RF bias current applied to the electrodes 200, 215 is typically from about 50 to about 3000 Watts. When the second electrode 215 also serves as an electrode static chuck, a separate DC voltage is applied to the electrode 215 to form an electrostatic charge that holds the substrate 20 to the chuck. The RF power is coupled to a bridge circuit and an electrical filter to provide DC chucking power to the electrode 215.

Based on the above, while Zhang may disclose an AC voltage supply for providing a plasma generating RF voltage to the second electrode 215 and a DC voltage supply for providing a chucking voltage to the second electrode 215, neither the AC voltage supply or the DC voltage apply a voltage between the first electrode 210 and the second electrode 215 to extract ions from the plasma generated by the antenna 190.

As such, it is respectfully submitted that Zhang fails to disclose or fairly suggest the features of claims 1 and 9 concerning *a power supply for applying a voltage between said first electrode and said second electrode to extract ions from the plasma generated by said antenna.*

Response After Final  
Serial No. 10/797,596  
Attorney Docket No. 042184

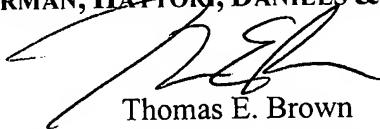
In view of the aforementioned amendments and accompanying remarks, Applicants submit that the claims, as herein amended, are in condition for allowance. Applicants request such action at an early date.

If the Examiner believes that this application is not now in condition for allowance, the Examiner is requested to contact Applicants' undersigned attorney to arrange for an interview to expedite the disposition of this case.

If this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. The fees for such an extension or any other fees that may be due with respect to this paper may be charged to Deposit Account No. 50-2866.

Respectfully submitted,

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